

SUPPLEMENTAL AMENDMENT AND RESPONSE TO FINAL OFFICE ACTION

Amendment

In the Claims

1-31. (Cancelled).

32. (Previously Presented) A graft comprising (1) a bioabsorbable filament having an exterior surface and a central lumen opening through the exterior surface, wherein the central lumen comprises a hydrophilic interior effective to wick the cells into the filament; and (2) cells capable of initiating hair follicle neogenesis comprising epidermal cells and dermal cells disposed within the lumen.

33. (Previously Presented) The graft of claim 32, wherein the dermal cells are obtained from skin, hair follicles, dermal papilla, or dermal sheath.

34. (Previously Presented) The graft of claim 32, wherein the dermal cells are an aggregated clump of dermal cells.

35. (Previously Presented) The graft of claim 32, wherein the epidermal cells are obtained from skin, hair follicles, inner root sheath, outer root sheath, or matrix.

36. (Previously Presented) The graft of claim 32, wherein the central lumen has an interior wall.

37. (Previously Presented) The graft of claim 32, wherein the epidermal cells are adhered to the interior wall of the lumen.

38. (Previously Presented) The graft of claim 32, wherein the epidermal cells are adjacent to the interior wall of the lumen.

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39. (Previously Presented) The graft of claim 32, wherein the interior wall of the lumen is smooth.

40. (Previously Presented) The graft of claim 32, wherein the interior wall of the lumen is porous.

41. (Cancelled).

42. (Cancelled).

43. (Previously Presented) The graft of claim 32, wherein the bioabsorbable filament is porous.

44. (Previously Presented) The graft of claim 32, wherein the interior wall of the lumen is coated with a bioabsorbable filler material.

45. (Previously Presented) The graft of claim 32, wherein the bioabsorbable filament is modified with a modifier selected from the group consisting of angiogenesis factors, growth factors, cell attachment binding site moieties, cell signaling molecules, proteins, glycoproteins, collagen, laminin, and fibronectin.

46. (Previously Presented) The graft of claim 45, wherein the cell attachment binding site moiety is a peptide comprising a cell attachment domain sequence.

47. (Previously Presented) The graft of claim 46, wherein the cell attachment domain sequence is Arg-Gly-Asp.

48. (Previously Presented) A graft comprising (1) a bioabsorbable filament having a central lumen having an interior wall; and (2) cells capable of initiating hair follicle neogenesis

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comprising epidermal cells and dermal cells, wherein the epidermal cells are adjacent to the interior wall of the lumen, and the dermal cells are located within the lumen.

49.-50. (Cancelled).

51. (Previously Presented) The graft of claim 32, wherein the epidermal and dermal cells are derived from different sources.

52. (Previously Presented) The graft of claim 32, wherein the epidermal cells and dermal cells are present in the graft in an amount and proportion sufficient to initiate hair follicle neogenesis.

53. (Previously Presented) The graft of claim 32, wherein filament comprises a first end that is closed.

54. (Previously Presented) The graft of claim 53, wherein the cells are concentrated at the first end.

55. (Previously Presented) The graft of claim 32, wherein the hydrophilic interior has a faster rate of bioabsorption or liquefaction than the exterior of the filament.